

HIERARCHICAL DATA COMPRESSION SYSTEM AND METHOD FOR CODING VIDEO DATA

5

ABSTRACT OF THE DISCLOSURE

A hierarchical data compression system and method for encoding and decoding video data by dividing each video frame of the video data into independent

10 layers. Each of the layers contains a specific frequency band that is less than the entire frequency spectrum contained in the video frame. This impendency allows each layer to be encoded and decoded independently of other layers. Because each layer contains a specific frequency band, any unwanted and extraneous frequencies that arise during encoding that are not present in the
15 original source are automatically removed. In general, the hierarchical data compression method divides video frames into layers, with each layer containing a specific frequency band. The layers then are encoded. Later, the layers are decoded to recover the video frames. The hierachal data compression system includes a hierarchical encoder and decoder for facilitating independent encoding
20 and decoding of each layer of the divided video frames.